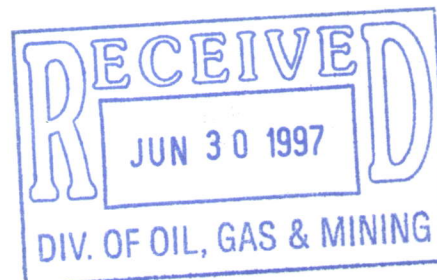




m/045/017

BARRICK RESOURCES (USA) INC. Tel: (801) 268-4447
Barrick Mercur Gold Mine Fax: (801) 266-4296
P.O. Box 838
Tooele, Utah 84074-0838

June 26, 1997



Mr. D. Wayne Hedberg
Utah Department of Natural Resources
Division of Oil, Gas, and Mining
1594 West North Temple
Suite 1210, Box 145801
Salt Lake City, UT 84114-5801

Dear Mr. Hedberg

Subject: Amendment to Notice Of Intention, #M/045/017

Pursuant to your correspondence to Barrick dated May 6, 1997, please find attached a May 23, 1997 letter from the Division of Water Quality approving the Barrick proposed conceptual closure plan for Valley Fill Leach Area #3. The DWQ has approved the design basis for the closure cover of #3, using sub-soil and topsoil layers, and no clay liner. The request by the Division for Barrick to provide a revised reclamation cost estimate will not be necessary. The previously submitted bond figures are appropriate for the approved closure requirements.

Please contact me at extension 335 should you have any questions concerning this submittal.

Respectfully,

A handwritten signature in cursive script that reads 'David P. Beatty'.

David P. Beatty
Environmental/Occupational Health Coordinator

Attachments

cc: G. M. Eurick
T. B. Faddies
C. L. Olsen
S. D. Davis
Brian Slade (Tooele County Health)



State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY

Michael O. Leavitt
Governor

Dianne R. Nielson, Ph.D.
Executive Director

Don A. Ostler, P.E.
Director

288 North 1460 West
P.O. Box 144870
Salt Lake City, Utah 84114-4870
(801) 538-6146 Voice
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(801) 536-4414 T.D.D.

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Don A. Ostler, P.E.
Executive Secretary

May 23, 1997

Glen Eurick, Director
Environmental Relations US
Barrick Resources (USA) Inc.
P.O. Box 838
Tooele, Utah 84074

Dear Mr. Eurick:

Subject: Valley Fill Area No. 3; Permit No. UGW450001, Conditional Approval - Conceptual Closure Plan

We have completed our review of the revised Conceptual Closure Plan submitted on August 30, 1996, for the Valley Fill Area #3 Leach Pad. In accordance with the Part I.H.1 of the above referenced permit the Conceptual Closure Plan is hereby approved. The development of the Final Closure Plan, required under Part I.H.2 of the permit, must be based on the concepts approved therein and upon the comments provided below. The Final Closure Plan is due to be submitted under the conditions of the permit, by September 30, 1997. From discussions between yourself and our staff, we understand that you intend to move the submittal date on this item forward to June 30, 1997. The following review comments summarize our understanding of the closure plan and how the plan will be implemented. When a ground water permit is reissued to cover the post closure period for the facility, the BAT requirements developed in the final closure plan will be incorporated into the permit. Until then, these requirements will become an enforceable Appendix C of the current permit.

Review Comments

1. In order to reduce contaminant concentrations in the heap leach drain down solutions Barrick proposes to inoculate recycled barren solution with cultured micro organisms. Column neutralization studies have shown this to be the most effective and "feasible" method for reducing contaminant concentrations. The neutralization studies indicated that fresh water rinsing would result in the greatest contaminant reductions of the alternatives studied. However, because of the quantity of water necessary and its disposal, the alternative is cost prohibitive. The closure plan demonstrated that although biological treatment will not reduce contaminant concentrations as much as fresh water rinsing, it can still reach concentrations which are environmentally protective and cost effective. This strategy will be augmented by natural precipitation and rest periods between rinsing cycles. Rinsing will be continued until the Division of Water Quality agrees that protective levels have been reached and further rinsing will not be effective in further reducing contaminant concentrations. The expected BAT standard for this alternative is cyanide-WAD concentrations less than or equal to 0.2 mg/l. Reductions in initial concentrations of mercury, arsenic, selenium and thallium are also expected due to precipitation and/or biological treatment.



Glen Eurick
May 23, 1997
Page 2

2. Vertical recover well(s) will be installed to a depth of 2-3 feet above the low spot on the liner in Valley Fill #3. These well(s) will be utilized during the rinsing process and after rinsing to remove pore water drain down.
- 3. The closure BAT standard will consist of a reclamation cover placed following the termination of rinsing. The cover will consist of a three foot layer of subsoil with the permeability of 1.0×10^{-5} and a one foot layer of topsoil. It will be a long term, self sustaining, nonmaintenance vegetative cover and will be seeded in accordance with Division of Oil Gas and Mining (DOGM) reclamation requirements. The cover will be monitored during the post closure period for erosion problems and plant growth success until the conditions for DOGM bond release are satisfied.

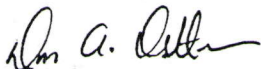
Items required for Inclusion in the Final Closure Plan

1. A design for the proposed vertical dewatering well(s) must be submitted for approval. Drilling method, well materials, depth, location and other relevant details should be included.
2. Design specifications and operational procedures and requirements for the biological treatment facilities should be submitted.
- 3. Plans and specifications for the placement of the reclamation cover and for the procedures for establishing plant growth.
4. Contaminant concentrations in fluids transferred from Area No. 3 to the tailings impoundment will not exceed current average contaminant concentrations in the tailings impoundment unless those fluids are transferred directly to the lined east bay of the tailings impoundment.
5. The vertical dewatering well(s) must remain in place for four years following the cessation of rinsing activities. The plan currently states that the wells will only be needed for four years following the cessation of ore leaching. Four years is needed, according to the modeling, to allow for significant drain down of the pore water within the heap. If less than four years is actually warranted by field conditions, then Barrick can request early closure of the well(s).

If you have any questions concerning this letter, please contact Dennis Frederick at 801-538-6146.

Sincerely,

Utah Water Quality Board



Don A. Ostler, P.E.
Executive Secretary

DAO:wlm

cc: Brain Slade, Tooele County Health Dept.

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